



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,274	03/03/2004	Ryoji Ninomiya	008312-0308597	8948
909	7590	04/03/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			WALKER, KEITH D	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			1745	
DATE MAILED: 04/03/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,274

Applicant(s)

NINOMIYA ET AL.

Examiner

Keith Walker

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-19 and 21-33 is/are pending in the application.
- 4a) Of the above claim(s) 4-17 and 25-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 18, 19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/19/06 has been entered.

Claims 4-19 & 21-33 are pending in the application and claims 4-17 & 25-33 are withdrawn from consideration. Claims 18, 19, 21-24 are pending examination.

Double Patenting

Due to the amendments of 1/19/06, the Double Patenting rejection over Application No. 10/805,497 is withdrawn.

Claim Interpretation

Concerning claims 18-24, the recitation that an element is "configured to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense and it is held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim (MPEP 2111, 2113).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 18, 19 & 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,057,051 (Uchida) in view of US Patent 6,522,955 (Colborn).

Uchida describes a personal computer, which has a body having a display unit and a controller. A detachable fuel cell unit powers the computer and comprises a fuel cell, a fuel tank and a sensor for detecting the amount of fuel remaining (Fig. 1; 3:1-40, 7:39-54). The sensor detects the amount of fuel remaining and a control unit relays the information from the sensor to the display unit (Col. 7, ll. 39-54). The status of low fuel on the display unit would prompt one to replace the fuel in order to keep the apparatus working. A replaceable fuel tank supplies the fuel cell with the appropriate fuel (Col. 7, ll. 33-37). If no fuel tank is present then the sensor shows a low fuel status on the display, indicating a bad connection or no connection of the fuel tank to the apparatus. It is inherent that a personal computer has a memory and a processing unit (CPU) to operate the functions of the computer and fuel cell system, such as calculating the amount of fuel remaining, operating times and operating conditions (7:39-60).

Concerning claim 24, the limitations are seen as a process of operating and while the limitations have been considered, they are not given patentable weight. The process of operating the apparatus does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Uchida is silent to the use of a storage unit for storing the information relating to the amount of fuel.

Colborn teaches a fuel cell unit having a fuel cell, a fuel tank, sensors and a communication device having a memory. The communication device is part of the fuel cell and communicates with the sensors that detect and store information on the operational parameters of the system such as the fuel storage unit, and communicating the data with other communication devices, such as a display device (Fig. 1 & 2; 4:15-35, 7:55-8:7, 9:12-30). One such operational parameter of a fuel storage unit would be the detection of remaining fuel. The motivation to use a fuel cell unit with a storage unit, as part of the fuel cell unit is to provide a power management system that is compact and efficient and provides controlled and monitored information to a user for easier use (3:55-4:15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the fuel cell unit of Uchida with the storage unit of Colborn to improve the performance of the fuel cell unit by providing a better power management system that is more compact and efficient.

Response to Arguments

Applicant's arguments with respect to claims 18, 19 & 21-24 have been considered but are moot in view of the new ground(s) of rejection based on the amendments.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Walker whose telephone number is 571-272-3458. The examiner can normally be reached on Mon. - Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KW


PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER